Fire Effects Assessment Using FIA Data in the Northern and Central Rocky Mountains

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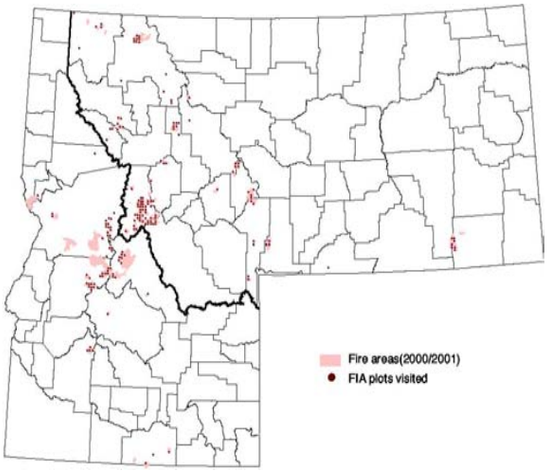
Objective: To assess wildfire effects on forest resources. This project utilizes the existing FIA (P2 and P3) plot network to evaluate the effects of fire on forest resources after the 2000 and 2001 fires in Idaho and Western Montana.

Methods: FIA field crews, with supplemental training in identifying levels of burn severity, re-visited 162 FIA field plots in Idaho and Montana. The collected data designed to provide fire-related information from the ground level up through the forest canopy.



FIA plots within the 2000 and 2001 burn perimeters in Montana and Idaho that have been revisited.

In addition to collecting standard FIA measurements, field crews:

- determined the condition of previously measured trees, down woody fuels, and understory vegetation;
- rated individual tree crown scorching, ground cover charring, and bark beetle activity; and
- collected comprehensive soil and duff samples using new national FIA procedures.

Assessment of down woody fuels. Trees in the background were rated for crown scorching, and the ground cover was rated for charring.

Results will:

1) show post fire change in forest structure, composition, and changes in soil productivity,
2) compliment ongoing studies to evaluate the influence of pre-wildfire forest structure on post wildfire burn severity,
3) help predict risk of insect attack as a function of burn severity, long-term coarse woody debris recruitment, snag longevity, vegetation response, and habitat changes.

Collection of duff and soil samples on FIA plots will be used to assess burn severity to the forest floor.

Current Status: Fire effects on the tree component, soil component, down wood, old growth habitat, and invasive plants will be summarized by burn severity class by Spring 2002. Plots that contain live trees will be revisited during the summer of 2003 to document insect activity and vegetation response.

Cooperation: This study was conducted through collaboration with R-1/R-4 FHM, and two Research Work Units within the Rocky Mountain Research Station: IW-FIA, and Forest Dynamics.